



Engineering Consultants  
for Industrial Measurements  
and Process Automation

Ingenieurbüro für  
industrielle Messtechnik  
und Prozessautomation

## PRESS RELEASE

### TEXAS and FLORIDA now available with WDG

Although working quite well X-ray fluorescence measurements did show a reasonable drawback in some online applications. Geometry between irradiating X-ray beam and the material had to be very constant due to the small interaction zone and the low energies of the radiation. While typical distances between the X-ray/detection assembly and the material to be measured were in the range of 10 mm the variation caused by the particle size of the material were 1 mm or more, depending of the particle size. Therefore change in distance is easily in the range of 10 % or more which causes inaccuracies in the measurement.

The 2013 version of TEXAS and FLORIDA will be available with the lately developed wide distance geometry. Based on enhanced detector technology and a special X-ray beam geometry the distance between the material and the detection system can be enhanced to 60..100 mm. This offers tremendous advantages:

- changes in geometry are not longer critical (a change of 1 mm is only a change of 1,0...1,6 % of the total distance);
- larger interrogation zone (which results in better statistics);
- no wear an tear by material accidentally touching the equipment;
- easier adjustment;
- a lot of online belt applications can be done completely contact free since no sled will be required for measurement. This reduces maintenance costs and improves reliability.

As a side effect the new geometrical arrangement also improves the signal/noise ratio since direct interaction between emitted X-rays and sensor is reduced.

Dr. Claus Bachmann  
J&C Bachmann GmbH